

09/745,896

Amendments to the Specification:

Please insert the following paragraphs between lines 16 and 17 of page 26 of the specification:

The concentration ratio of furfural to acrolein can be adjusted so as to satisfy any one of the following equations:

a) $3 \leq (\text{furfural concentration by weight})/(\text{acrolein concentration by weight}) \leq 100$; or

b) $3 \leq (\text{furfural concentration by weight})/(\text{acrolein concentration by weight}) \leq 30$.

One method for purification of acrylic acid according to the present invention includes the steps of providing a crude acrylic acid containing furfural and acrolein as impurities, determining a ratio of a concentration of furfural to a concentration of acrolein, determining whether the ratio of the concentration of furfural to the concentration of acrolein is within a preset range and, if so, continuing with said method, determining whether the ratio of the concentration of furfural to the concentration of acrolein is outside said preset range and, if so, adjusting the ratio of the concentration of furfural to the concentration of acrolein to fall within said preset range, charging said crude acrylic acid with a chemical that treats aldehydes, with said step of charging taking place after said steps of determining and after said step of adjusting, and then distilling said crude acrylic acid having said chemical that treats aldehydes while inhibiting formation of acrylic acid polymers.

(17979.DOC) (Preliminary Amendment--page 2 of 18)